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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,316	09/19/2003	Florence Defaix	006-040000US	7908
33486 7590 05/04/2007 HEIMBECHER & ASSOC., LLC P O BOX 33 HAMEL, MN 55340-0033			EXAMINER STEELMAN, MARY J	
			ART UNIT 2191	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/666,316	<b>Applicant(s)</b> DEFAIX ET AL.	
	<b>Examiner</b> MARY STEELMAN	<b>Art Unit</b> 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to Amendments to the Claims and Specification, Drawings, and Remarks received 02/07/2007. Per Applicant's request, claims 1-6 & 9-28 are amended. New claim 29 has been added. Claims 1-29 are pending.

#### ***Drawings***

2. In view of the submission of Replacement Sheet Drawing Figure 4, the prior objection is hereby withdrawn.

#### ***Specification***

3. In view of the amendment to the Specification, the prior objection is hereby withdrawn.

#### ***Claim Rejections - 35 USC § 112***

4. In view of the amendment to claims 2, the prior rejection is hereby withdrawn.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Examiner maintains the 112 2<sup>nd</sup> paragraph rejection of claims 10 and 28. Claims 10 and 28 disclose "a regional proxy server", which was not disclosed in the Specification. For examination purposes, Examiner interprets this limitation to mean "a plurality of chained together proxy servers, each connected to one proxy server, said one proxy server connected to a central server."

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1-8, 10-26, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,629,138B1 to Lambert et al.

Per claim 1:

A version control system for managing versioned files used in software development, the version control system comprising:

- a) a central server adapted to store a repository of said versioned files, said central server also being adapted to control all modifications to said versioned files;
- b) a proxy server connected to said central server, said proxy server including a read-only cache adapted to store data obtained from said repository through communication with said central server;
- c) at least one client connected to said proxy server, said at least one client comprising a version manager adapted to generate requests for said versioned files through said proxy server to reduce network traffic between said proxy server and said central server and to reduce load on said central server.

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Lambert: FIG. 2, Backend Server, #350, Caching Server, #304 Col. 5: 40, 48 Client Machines, #100 Col. 5: 60-col. 6: 12, Caching servers can be deployed around the network to balance network load and provide concentration of frequently used information...each caching server 304 is implemented as a standard HTTP proxy server...coupled together hierarchically. A subscribers requests to retrieve certain published content are managed by subscription manager 306...Web browser 100 sends an HTP request to a remote caching server 204...caching server 204 either retrieved cached content from cache 300 or sends an HTTP request via the internet to a publisher's machine (backend server) to retrieve non-cached content.

Per claim 2

- a plurality of branches and a plurality of proxy servers;
- wherein, for a first branch of said plurality of branches, said central server is adapted to store a list of proxy servers selected from said plurality of proxy servers and associated with said first branch
- wherein the version control system is configured to send an update to notify each proxy server in the list when a change is made to said first branch.

Lambert: Col. 5: 58-col. 6: 12, Caching servers can be deployed around the network to balance network load and provide concentration of frequently used information...each caching server 304 is implemented as a standard HTTP proxy server...coupled together hierarchically. Publishing servers deliver via multicast on the LAN (col. 23: 19-23 & col. 26: 54-60). Col. 28: 52: The proxy server stores incoming notifications. Col. 7: 13-46, The back end server is a collection of software that works with client caching servers to optimize use of a publisher's site

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by its subscribers...each publisher has a back end server that controls use of its content...The back end server is responsible for...maintenance of cache control meta-data...updated information is uploaded from the servers... Col. 22: 49, pushes notification Col. 8: 19 discloses a TOC (Table of Contents) used between the content provider and the caching server to determine whether an updated version is available.

Per claim 3 :

-central server includes an access control system adapted to validate requests received by said central server.

Lambert: Col. 14: 32-39, Some sites may not want any of their content cached...criteria are to always be verified from the network, and satisfied from the cache only if the content has not changed (access control to validated content) Col. 24: 23-27, The notification system uses existing security infrastructure to give subscribers assurance that incoming notifications are indeed from the desired publisher...

Per claim 4:

-said at least one client is adapted to obtain a version of a file in said repository of said versioned versions of files by requesting said version from the proxy server;  
-the proxy server being adapted to provide the version from said read-only cache when available;  
and by requesting the version from the central server otherwise.

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Lambert: Col. 12: 57-63, caching server is asked to retrieve content from the web, the caching server places the content in local storage while returning the content to the requestor...The server then satisfies subsequent request for the same content from the local storage...

Per claim 5:

-said proxy server includes a mechanism for providing a desired version of a file in said repository of said versioned files to said at least one client using said read-only cache when the desired version is available from said read-only cache, and by requesting the desired version from the central server otherwise.

Lambert: FIG. 4, Examining the TOC to determine whether the data within the collection of data is valid, Updating the collection of data if the data contained in the collection of data is invalid.

Per claim 6:

-the at least one client is adapted to modify the repository through said central server.

Lambert: Col. 9: 41-42, actual commands to manage a TOC can be issued either from a client machine...or from a management interface...

Per claim 7:

-the central server includes a checkout mechanism for controlling modification to the repository.

Lambert: Col. 10: 38-65, Adding...Removing...Modifying...changing its last modification date, version stamp...

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Per claim 8:

-the central server includes a log of changes made to the repository.

Lambert: Col. 10: 41, version stamp Col. 32: 51, modification history

Per claim 10:

-a plurality of chained together proxy servers adapted to serve a geographical area, wherein each proxy server of said plurality of chained together proxy servers is connected to at least one client,

-a regional proxy server connected to said central server and to each proxy server of said plurality of chained together proxy servers wherein updates from the central server to the plurality of chained together proxy servers are first sent to the regional proxy.

Lambert: Col. 26: 54-60, multicasts

Per claim 11:

A method of modifying a repository of versions of files in a version control system used in software development, said version control system including a central server and a first interconnected client interconnected to said central server through a first intervening proxy, a second client, and a second proxy, said method comprising the following steps:

- a) the first interconnected client requesting from the central server, through the first intervening proxy, a lock on a version of a file in the version control system;
- b) the central server checking whether the version is unlocked and, if the version is unlocked,



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granting the request of said first interconnected client through said first intervening proxy;

c) the central server sending an update to said second client and to said second proxy.

Lambert: See rejection of limitations addressed in claim 1 above. Col. 9: 34-35, The TOC catalog also contains access control (locking / unlocking protocols) and authentication information. Col. 10: 35, modifying content

Per claim 12:

-said lock permits only said first interconnected client to modify said version of said file.

Lambert: See rejection of claim 11 above. Col. 9: 40-61, client side edits

Per claim 13:

-said first interconnected client performing modification to said version of said file and returning the modification to said central server through said first intervening proxy.

Lambert: Col. 8: 67 – col. 9: 1, TOC to caching server

Per claim 14:

-said central server sending said modification to said second client and to said second proxy.

Lambert: Col. 12: 57-60, Caching server places the content in local storage while returning the content to the requestor.

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Per claim 15:

A central server in a version control system used in software development, the version control system including a proxy server having a read-only cache and connecting a client to the central server, the central server comprising the following:

- a) a repository of versioned files used in said software development;
- b) a version manager adapted to provide a version of a file from said repository to said proxy server;
- c) an access control system adapted to manage a request from the client to modify the repository;
- d) a memory structure adapted to store a log of modifications made to the repository and adapted to store a list of portions of said repository stored in the read-only cache of the proxy server.

Lambert: See rejection of limitations addressed above.

Per claim 16:

-said log is used to update said read-only cache in said proxy server after a disruption to the connection between said proxy server and said central server.

See rejection of limitations as addressed in claim 9 above.

Per claim 17:

A proxy server in a version control system used in software development, the version control system including a client and a central server containing a repository of versioned files, said proxy server comprising the following:

- a) a read-only cache adapted to store a requested version of a file requested by the client and

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received for storing data from said repository;

b) a version provider adapted to provide the requested version of the file to said client, the version provider being configured to first check the read-only cache for the requested version and if the requested version is not found, to request the requested version from said central server on behalf of said client.

Lambert: See rejection of limitations addressed above. Col. 12: 55-67, caching server places the content in local storage while returning the content to the requestor...then satisfies subsequent request for the same content from the local storage rather than going to the network.

Per claim 18:

-the read-only cache is configured to store copies of a plurality of versions of files requested from said central server by said client.

Lambert: Read only cache stores copies of content as long as the expiration date has not been reached (col. 32: 3). Col. 33: 2, the server owning the content stores a history permanently, an expired object may be refreshed.

Per claim 19:

A computer-readable medium containing processor instructions for implementing a version control system to be used in software development, including instructions for the following steps:

a) storing a repository of versioned files on a central server configured to control all modifications to said versioned files;

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b) establishing communication between said central server and a proxy server including a read-only cache configured to store for storing data obtained from said repository through communication between said central server and said proxy server;

c) establishing communication between said proxy server and a client comprising a version manager adapted to generate a request for a versioned file from said repository through said proxy server to reduce network traffic between said central server and said client and to reduce load on said central server.

See rejection of limitations as addressed in claim 1 above.

Per claim 20:

-maintaining a list of additional proxy servers proxies for each branch in the version control system, said additional proxy servers being in addition to said proxy server in communication with said client;

-notifying said additional proxy servers in the list when a change is made to said versioned file each branch.

Lambert: Col. 12: 15, Meta data and subscription policies are used to handle version control and notification of proxy servers. Col. 12: 35, multicast notification

Per claim 21:

-said central server includes an access control system adapted to validate requests received by said central server from said proxy server, said computer-readable medium further comprising instructions for the following step: validating said request received by said central server.

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Lambert: Col. 12: 41-42, secure HTTP and digital signature to authenticate

Per claim 22:

-commanding said version manager of said client request the versioned file from the proxy server  
commanding the proxy server to provide the versioned file from said read-only cache when the  
versioned file is stored in said read-only cache;

-commanding the proxy server to request the versioned file from the central server when the  
versioned file is not stored in said read-only cache.

See rejection of limitations as addressed in claim 17 above.

Per claim 23:

-said proxy server providing the versioned file to the client using said read-only cache when the  
versioned file is stored in said read-only cache and said proxy server requesting the versioned  
file from the central server when the versioned file is not stored in said read-only cache.

See rejection of limitations addressed in claims 17 and 22 above.

Per claim 24:

-said client requesting via said proxy server modifications to said versioned file in said  
repository;

-said proxy server requesting said central server to make said modification to said versioned file  
in said repository.

See rejection of claim 6 above.

Per claim 25:

-controlling modification of the repository via a checkout mechanism comprising part of said central server.

See rejection of limitations addressed in claims 7 and 11 above.

Per claim 26:

-keeping in the central server a log of changes made to the repository.

See rejection of claim 8 above.

Per claim 28:

-chaining together a plurality of proxy servers configured to serve a geographic area;  
-establishing communication between the plurality of chained together proxy servers and a regional proxy server;  
-establishing communication between said regional proxy server and said central server and sending updates from the central server for the plurality of chained together proxy servers are first to the regional proxy server.

Lambert: See rejection of limitations addressed above. Col. 4: 30-col. 5: 25, wide area networks, back end server / content providers, An intelligent caching infrastructure that uses information called Meta Data about the content to control client and intermediate caches (plurality of chained together proxy servers)...The caches become intelligent delivery nodes...combine underlying transports and notifications... Col. 7: 6-10, A caching server can

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operation its own on behalf or a community of many users, who in turn have caching servers...can be placed at intranet/Internet boundaries to provide information concentration and conserve network bandwidth. Col. 5: 58, any number of intermediate caching servers

Per claim 29:

-said proxy server is transparent to users of said at least one client.

Lambert: Caching servers at col. 6: 46 Col. 6: 9-12, Web browser sends an HTTP request and caching servers provides it from its cache or by otherwise retrieving the content.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9 and 27 are are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,629,138B1 to Lambert et al., in view of US Patent Application Publication 2005/0131905A1 to Margoulus et al.

Per claims 9 & 27:

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Lambert failed to explicitly disclose:

-the log is used to update said proxy server after a disruption to the connection between the proxy server and the central server.

However, Margoulus disclosed

[0100] The repository is designed to be able to remember historical versions of file data forever.

This can be accomplished using standard techniques such as redundancy and archival media.

Files which have been removed from the current version of a repository file system can be restored by copying them from an earlier version. Historical versions of files which have changed remain available. Hash information about each file system is digitally timestamped, to allow the repository to provide legal evidence of the existence and contents of files at specific times in the past.

Therefore, it would have been obvious, to one of ordinary skill in the art at the time of the invention to modify Lambert, using the teaching of Margoulus because one would be motivated to recover from a network failure. Lambert did provide a history of all content.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (571) 272-3704. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached at (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman

04/18/2007

*Mary Steelman*  
*Patenting Examiner*